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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/808,896   | 03/25/2004  | Bryan L. Dalton      | LM(F)6496 NP        | 7411             |
| 26294  | 7590        | 02/27/2006           | EXAMINER            |                  |
| TAROLLI, SUNDHEIM, COVELL & TUMMINO L.L.P.<br>1300 EAST NINTH STREET, SUITE 1700<br>CLEVEVLAND, OH 44114 |             |                      | SAMS, MATTHEW C     |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 2643                |                  |

DATE MAILED: 02/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |                                      |  |
|------------------------------|--------------------------------------|--------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/808,896 | <b>Applicant(s)</b><br>DALTON ET AL. |  |
|                              | <b>Examiner</b><br>Matthew C. Sams   | <b>Art Unit</b><br>2617              |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement filed on 3/25/2004 has been considered.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 8 and 10-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Tanaka et al. (US-6,671,509 hereafter, Tanaka).

Regarding claim 1, Tanaka teaches a system for upgrading a mobile data acquisition device comprising a software upgrade for use with the mobile data acquisition device, the software upgrade being located on a software management computer (Col. 2 lines 35-39), the software management computer transferring the software upgrade from the software management computer to a local communications computer (Col. 2 lines 35-39), the local communication computer transferring the software upgrade to the mobile data acquisition device, the local communications

computer storing the software upgrade for transfer to other mobile data acquisition devices. (Col. 6 lines 45-56)

Regarding claim 8, Tanaka teaches the mobile device maintains a staging area for temporarily storing the software upgrade. (Col. 4 lines 12-33 and Col. 8 lines 24-38)

Regarding claim 10, Tanaka teaches the mobile device marks a staging area as an execution area and marks an execution area as a staging area. (Col. 4 lines 12-33 and Col. 8 lines 24-38)

Regarding claim 11, Tanaka teaches a system for upgrading a software application including a data acquisition device for use with the software application (Fig. 2 (b) [S11-S13]), a software management computer for transmitting an upgrade of the software application from the software management computer to the data acquisition device (Col. 2 lines 35-39), a local communication computer transferring the software upgrade to the mobile data acquisition device, the local communications computer storing the software upgrade for transfer to other mobile data acquisition devices and transferring the update to them if necessary. (Col. 6 lines 45-56)

Regarding claim 12, Tanaka teaches the data acquisition device initiates the transfer of the upgrade of the software application from the software management computer through the local communications computer. (Fig. 1, Col. 2 lines 21-38 and line 63 through Col. 3 line 7)

Regarding claim 13, Tanaka teaches the local communications computer stores the upgrade for other data acquisition devices. (Fig. 1 [9], Col. 2 lines 21-38, Col. 2 line 63 through Col. 3 line 7 and Col. 6 lines 45-56)

Regarding claim 14, Tanaka teaches the data acquisition device acknowledges receipt of the upgrade from the software management computer. (Col. 7 lines 52-57)

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-5, 15, 16 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka in view of Riordan et al. (US 2003/0100297 hereafter, Riordan).

Regarding claim 2, Tanaka teaches a system for software management for a mobile device as claimed in claim 1, but differs from the claimed invention by not explicitly stating a bill of materials for the software upgrade.

In an analogous art, Riordan teaches a method of remote software configuring in programmable mobile devices (Page 1 [0001], [0012] and Page 3 [0032]) that includes a master bill of materials file for the software upgrade version verification on a central server. (Page 1 [0013]) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to implement the invention of Tanaka after modifying it to incorporate a bill of materials for software version verification of Riordan. One of ordinary skill in the art would have been motivated to do this since it version

verification ensures mobile device compatibility with the wireless network. (Riordan Page 1 [0004, 0013 & 0014])

Regarding claim 3, Tanaka in view of Riordan teaches a local communications computer stores a local bill of materials file for the software upgrade. (Riordan Page 1 [0013] through Page 2 [0016])

Regarding claim 4, Tanaka in view of Riordan teaches the local bill of materials and the master bill of materials are compared to determine what version of software the mobile device is using and whether an upgrade is necessary. (Riordan Page 1 [0013-0015] & Page 2 [0018-0020])

Regarding claim 5, Tanaka in view of Riordan teaches the mobile data acquisition device verifies a version of software held by the mobile data acquisition device. (Riordan Page 1 [0015] through Page 2 [0019])

Regarding claim 15, Tanaka teaches a system for upgrading a software application including a data acquisition device for use with the software application (Fig. 2 (b) [S11-S13]), a software management computer for transmitting an upgrade of the software application from the software management computer to the data acquisition device (Col. 2 lines 35-39), a local communication computer transferring the software upgrade to the mobile data acquisition device, the local communications computer storing the software upgrade for transfer to other mobile data acquisition devices and transferring the update to them if necessary. (Col. 6 lines 45-56) Tanaka differs from the claimed invention by not explicitly stating an updating of the master bill of materials to indicate the updating of the software.

In an analogous art, Riordan teaches a method of remote software configuring in programmable mobile devices (Page 1 [0001], [0012] and Page 3 [0032]) that includes a master bill of materials file for the software upgrade version verification on a central server. (Page 1 [0013]) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to implement the invention of Tanaka after modifying it to incorporate a bill of materials for software version verification of Riordan. One of ordinary skill in the art would have been motivated to do this since it version verification ensures mobile device compatibility with the wireless network. (Riordan Page 1 [0004, 0013 & 0014])

Regarding claim 16, Tanaka in view of Riordan teaches the transfer of the upgrade of the software application from the software management computer through a local communications computer. (Tanaka Fig. 1, Col. 2 lines 21-38 and line 63 through Col. 3 line 7)

Regarding claim 18, Tanaka in view of Riordan teaches the instructions for activating the upgrade of the software application on the mobile device. (Tanaka Col. 7 lines 52-61)

Regarding claim 19, Tanaka in view of Riordan teaches the mobile device maintains a staging area for temporarily storing the software upgrade. (Tanaka Col. 4 lines 12-33 and Col. 8 lines 24-38)

Regarding claim 20, Tanaka in view of Riordan teaches the computer program has the ability to save the software upgrade in memory in order to update the software

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of another mobile device. (Tanaka Fig. 1 [9], Col. 2 lines 21-38, Col. 2 line 63 through Col. 3 line 7 and Col. 6 lines 45-56)

6. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka in view of Kincaid (US 2004/0117785).

Regarding claim 6, Tanaka teaches a system for software management for a mobile device as claimed in claim 1, but differs from the claimed invention by not explicitly reciting the mobile data acquisition device reboots after obtaining the software upgrade.

In an analogous art, Kincaid teaches a component download manager for a wireless mobile device (Page 1 [0008]) that includes a master bill of materials with software revision numbers, a local bill of materials for comparison with the master bill of materials (Page 1 [0008-0012]), and after the download manager replaces the old versions of files, the mobile device is rebooted. (Fig. 4 [435] and Page 5 [0053]) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to implement the invention of Tanaka after modifying it to incorporate the mobile device rebooting of Kincaid. One of ordinary skill in the art would have been motivated to do this since requiring the reboot of a mobile device enables the recently downloaded programs to be installed on the mobile device, initiated on the mobile device and ensures the old software is no longer running in memory. (Kincaid Page 5 [0053])

Regarding claim 7, Tanaka in view of Kincaid teaches the software upgrade is the upgraded part of an entire software application. (Kincaid Fig. 4 [410, 415, 420, 425 & 430])



7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka in view of Ji et al. (US-6,836,657 hereafter, Ji).

Regarding claim 9, Tanaka teaches a system for software management for a mobile device as claimed in claim 1, but differs from the claimed invention by not explicitly reciting restoring a prior version of the software upgrade if the verification of the software upgrade fails.

In an analogous art, Ji teaches a method for updating software in a wireless mobile device (Col. 3 lines 23-25) that includes error detection wherein the error detection restores the client device to the pre-update state of operation. (Col. 3 lines 23-30) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to implement the invention of Tanaka after modifying it to incorporate the software restoration if an error is detected of Ji. One of ordinary skill in the art would have been motivated to do this since the ability of a wireless device to restore the original software configuration gives the software the ability to try to resume or re-initiate the software update. (Col. 3 lines 23-30)

8. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka in view of Riordan as applied to claim 15 above, and further in view of Kincaid.

Regarding claim 17, Tanaka in view of Riordan teaches a system for software management for a mobile device as claimed in claim 15, but differs from the claimed invention by not explicitly reciting an instruction for rebooting the mobile device.

In an analogous art, Kincaid teaches a component download manager for a wireless mobile device (Page 1 [0008]) that includes a master bill of materials with

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software revision numbers, a local bill of materials for comparison with the master bill of materials (Page 1 [0008-0012]), and after the download manager replaces the old versions of files, the mobile device is rebooted. (Fig. 4 [435] and Page 5 [0053]) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to implement the invention of Tanaka in view of Riordan after modifying it to incorporate the mobile device rebooting of Kincaid. One of ordinary skill in the art would have been motivated to do this since requiring the reboot of a mobile device enables the recently downloaded programs to be installed on the mobile device, initiated on the mobile device and ensures the old software is no longer running in memory. (Kincaid Page 5 [0053])

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US-6,687,901 to Imamatsu regarding a method and apparatus for updating software in a radio terminal device.
- US-6,199,204 to Donohue regarding distribution of software updates via a computer network.
- US-6,052,600 to Fett et al. regarding a software programmable radio and method for configuring.
- US-5,896,566 to Averbuch et al. regarding a method for indicating updated software availability to portable wireless communication devices.
- US 2002/0077094 to Leppanen regarding upgrading software in a mobile telephone.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew C. Sams whose telephone number is (571)272-8099. The examiner can normally be reached on M-F 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571)272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MCS  
2/14/2006

  
**LESTER G. KINCAID**  
**SUPERVISORY PRIMARY EXAMINER**